

Name: \_\_\_\_\_

## p1029: Combine Like Terms (v11)

### Example

Combine like terms.

$$-8x + 7x^2 - 9x^2 - 5x + 3 - 4x + 5 + 6x^2 + 4 - 3x^2$$

### Answer

Combine the quadratic terms.

$$7x^2 - 9x^2 + 6x^2 - 3x^2 \equiv 1x^2$$

Combine the linear terms.

$$-8x - 5x - 4x \equiv -17x$$

Combine the constant terms.

$$3 + 5 + 4 \equiv 12$$

The final result:

$$x^2 - 17x + 12$$

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### Question 1

Combine like terms.

$$-3x^2 - 4 + 5 - 7 + 6x + 2x^2 - 8x^2 + 3x + 7x + 4x$$

$$-9x^2 + 20x - 6$$

## Question 2

Combine like terms.

$$-5x^2 + 8x^2 + 7x - 4x + 3 + 4x - 8 - 3x^2 - 9 + x^2$$

$$x^2 + 7x - 14$$

## Question 3

Combine like terms.

$$7x + 6x^2 - 7 + 9 - 6x + 8x^2 + 2x - 3x^2 + 4 - 2x^2$$

$$9x^2 + 3x + 6$$

## Question 4

Combine like terms.

$$-5x - 3x + 4x^2 - 9x^2 - 2 - x^2 + 8 + 7x - 8 + 2x^2$$

$$-4x^2 - x - 2$$